

## Cummins Onan Digital Display Kits 541-0936 and 541-1130

### Digital Display

Up to three digital displays (Figure 1) may be connected for remote control and monitoring of the genset.

### Location

The digital display is not an ignition protected device. It must be installed in areas where gasoline vapors cannot accumulate.

**⚠WARNING** *Gasoline vapors can explode causing severe personal injury or death. The digital display is not an Ignition Protected device. It must be installed in areas where gasoline vapors cannot accumulate.*

### Mounting

Refer to the outline drawing (Figure 5) when deciding where to place the the digital display. Make sure that drilling and cutting will not damage anything behind the console where the digital display is to be mounted and that there is sufficient wiring space. The template (Figure 6) may be cut out and taped at the desired location. Drill 1/16 inch holes in the centers of the screw holes and in the corners of the cut-out through which the body will protrude. Secure the panel with No. 6 screws.

### Warning Label

When the digital display is installed to start and stop a Model MGKBC or MGKBD *gasoline* engine genset, the warning label in the kit (Figure 2) must be affixed next to the Display to warn the operator to ventilate the genset compartment before starting the genset.

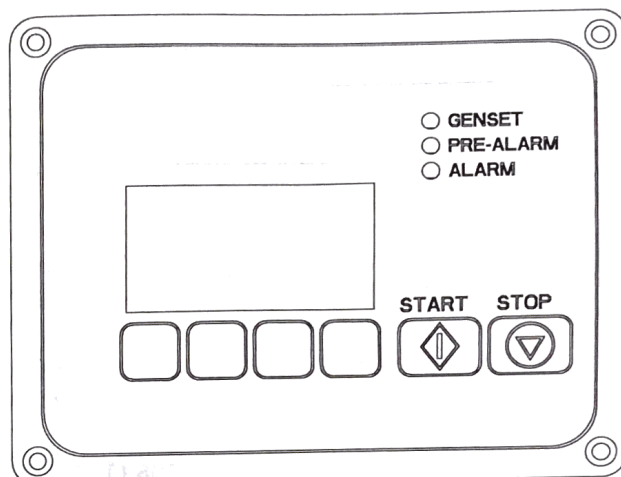


FIGURE 1. DIGITAL DISPLAY

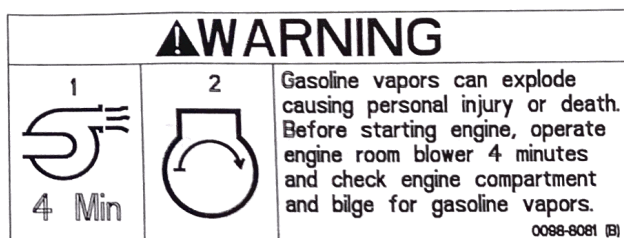


FIGURE 2. WARNING LABEL

## Wire Harnesses

The genset and digital display connectors are pin-to-pin compatible. Refer to the applicable wiring diagram in the genset Installation Manual.

**Cummins Onan Harnesses:** Plug-in wire harnesses of various lengths are available for connecting the digital display to the genset (Figure 3).

**Non-Cummins Onan Harnesses:** For connectors use sealed 8-pin Deutsch® Part Number **DT06-08S** plugs and Part Number **DT04-08P** receptacles to mate with the genset and digital display connectors. Use 16 AWG insulated wiring. When harnesses are 45 to 150 feet (14 to 46 meters) long, use 14 AWG wiring for connector pins 2, 3 and 4.

**Electromagnetic Interference (EMI):** To reduce the effects of EMI, take the following precautions when routing the wire harness:

- Keep the harness at least 5 inches (127 mm) away from AC power sources. Avoid passing

the harness through electrical panels or near transformers or other high voltage equipment.

- Do not run the harness parallel to AC wiring.
- In harnesses over 150 feet (46 meters), use twisted-pair leads for connector pins 7 and 8.

**CAUTION** EMI can cause signal distortion resulting in unintended equipment operation. Carefully follow these wiring guidelines.

**Harness Feed-Through Holes:** Harness feed-through holes in decks and bulkheads must be sealed to prevent exhaust gases and flammable vapors from entering the rest of the boat. Wiring conduit must be sealed inside as well as outside.

**WARNING** EXHAUST GAS IS DEADLY—GASOLINE VAPORS ARE EXPLOSIVE! Seal all wiring feed-through holes in decks and bulkheads to prevent exhaust gases and flammable vapors from entering the rest of the boat.

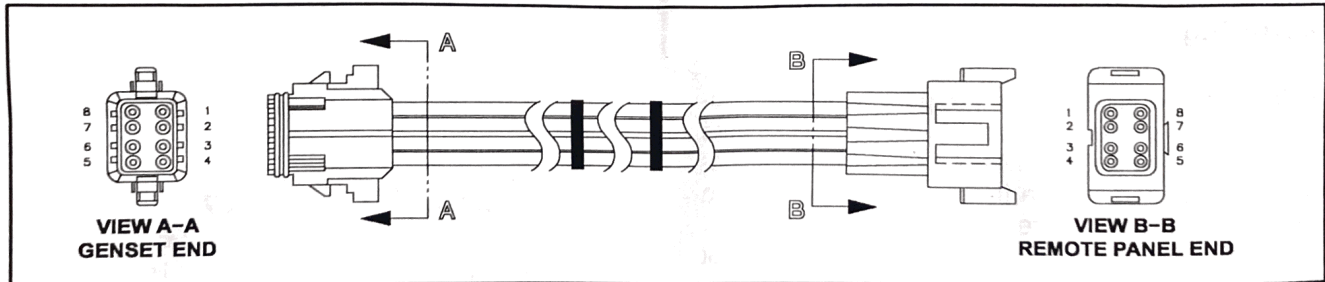


FIGURE 3. PLUG-IN WIRE HARNESSES AVAILABLE IN 15, 25, 45, 75, 100 & 150 FOOT LENGTHS

## Connections

Disconnect the negative (-) battery cable from the battery to prevent accidental starting.

**⚠ WARNING** *Accidental starting of the genset can cause severe personal injury or death. Disconnect the negative (-) battery cable from the battery to prevent starting.*

**Genset Remote Control Connector:** The remote control connector is a **DT04-08P** receptacle stowed inside the genset control box.

**e-Series Digital Display Connectors:** The digital display has 2 short 8-lead wire bundles. One terminates in a **DT06-08S** plug and the other in a **DT04-08P** receptacle.

Up to three (3) *e-Series Digital Displays* may be connected, along with one or more Start-Stop switches. Figure 4 illustrates an arrangement of connections for remote control.

## Testing

After all connections have been made and the installation has been completed, start, operate and stop the genset from each remote station in accordance with the genset Operator's Manual, carefully observing all of its instructions and safety precautions. The operator's instructions for the digital display are in the genset Operator's Manual.

Make any necessary repairs and reconnections. The genset wiring diagram is in its Installation Manual.

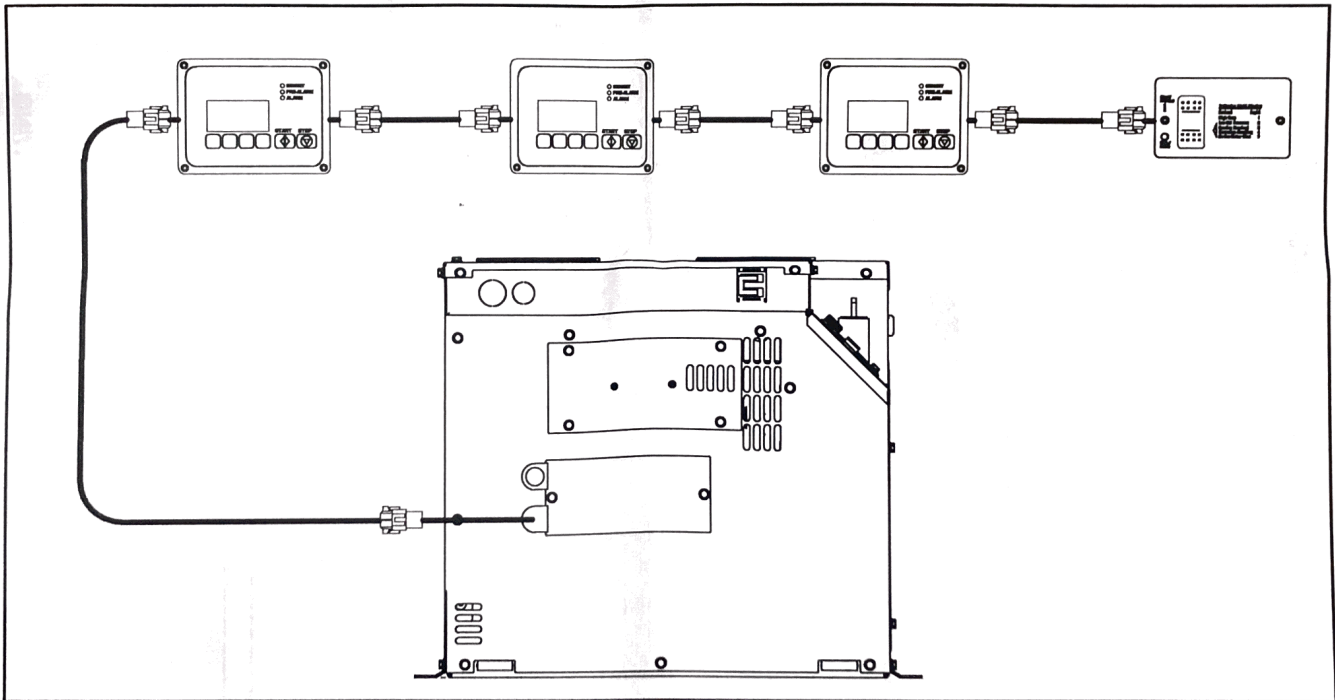


FIGURE 4. TYPICAL CONNECTION ARRANGEMENT OF DIGITAL DISPLAYS AND REMOTE CONTROL SWITCHES

Dimensions are in millimeters (inches)

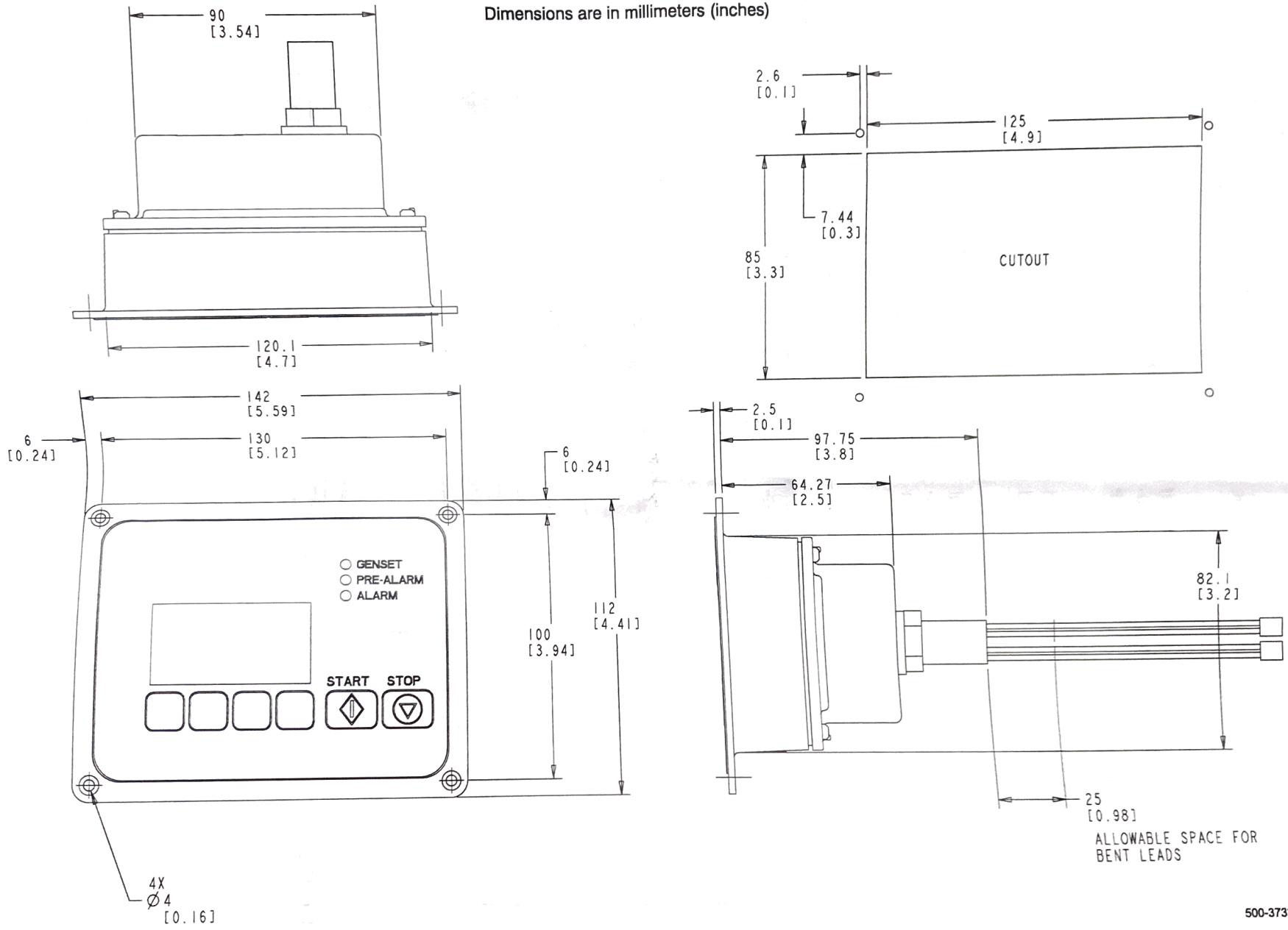
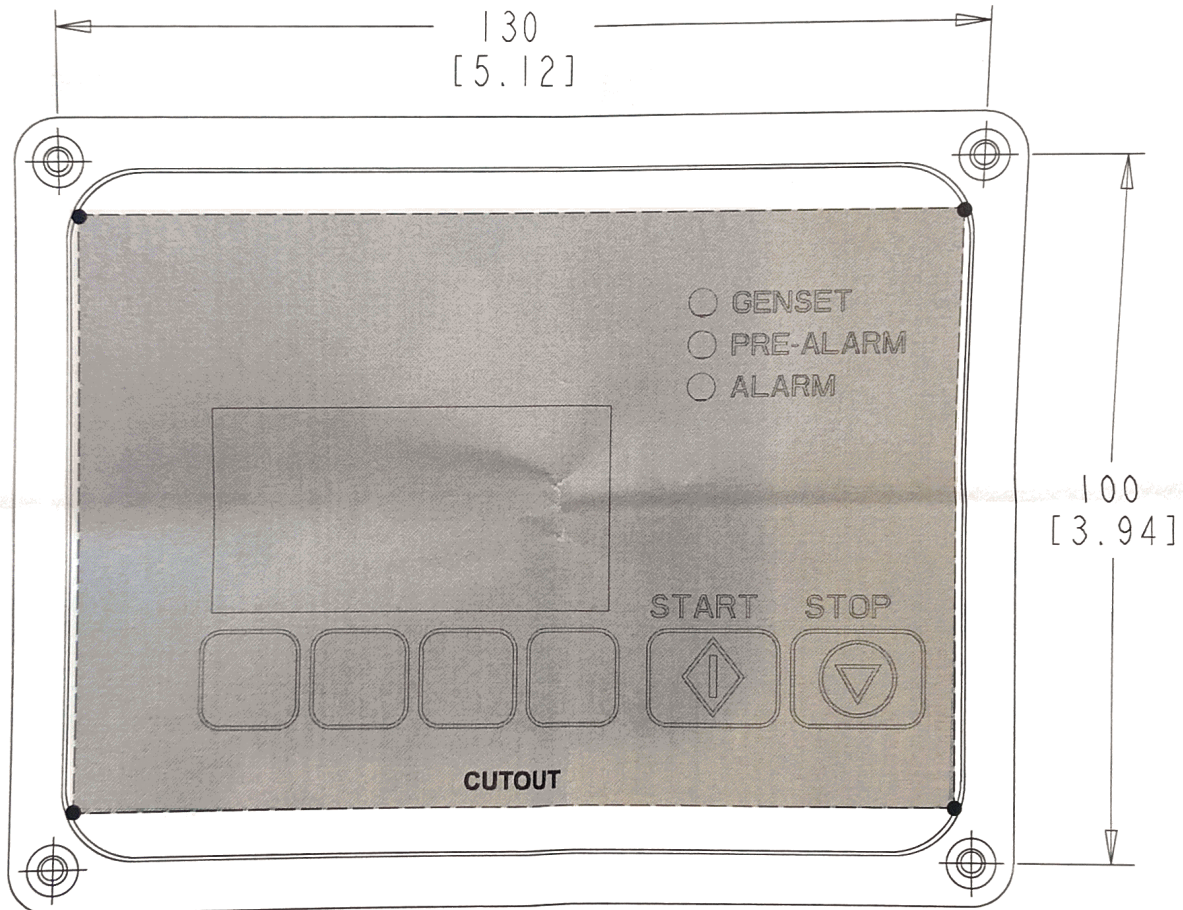


FIGURE 5. OUTLINE DRAWING

Dimensions are in millimeters (inches)



***Do not use a copy of this sheet as a template. A copier might not reproduce the exact dimensions.***

**FIGURE 6. TEMPLATE**